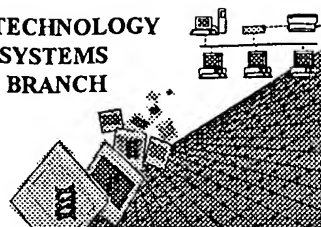


BIOTECHNOLOGY  
SYSTEMS  
BRANCH



**RAW SEQUENCE LISTING**  
**ERROR REPORT**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/002,631B  
Source: OIPE  
Date Processed by STIC: 2/11/2003

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: [patin3help@uspto.gov](mailto:patin3help@uspto.gov) or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER**  
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Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>) , EFS Submission User Manual- ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:  
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7<sup>th</sup> Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202  
Or  
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
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OIPE

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/002,631B

DATE: 02/11/2003

TIME: 10:44:56

Input Set : A:\10002631sequencelisting.txt

Output Set: N:\CRF4\02112003\J002631B.raw

3 <110> APPLICANT: Graff, Jonathon M.  
 4 Muenster, Matthew  
 6 <120> TITLE OF INVENTION: METHODS TO IDENTIFY SIGNAL SEQUENCES  
 9 <130> FILE REFERENCE: A34943 090495.0243  
 11 <140> CURRENT APPLICATION NUMBER: 10/002,631B  
 12 <141> CURRENT FILING DATE: 2001-10-31  
 14 <150> PRIOR APPLICATION NUMBER: 60/300,309  
 15 <151> PRIOR FILING DATE: 2001-06-21  
 17 <160> NUMBER OF SEQ ID NOS: 324  
 19 <170> SOFTWARE: FastSEQ for Windows Version 4.0

## ERRORED SEQUENCES

Does Not Comply  
 Corrected Diskette Needed

*pp 1, 3-4*

2069 <210> SEQ ID NO: 74  
 2070 <211> LENGTH: 238  
 2071 <212> TYPE: PRT  
 2072 <213> ORGANISM: Homo sapiens  
 2074 <400> SEQUENCE: 74  
 2075 Cys Cys Phe Val Pro Gly Gln Lys Ile Phe Ala Ala Gln Thr Asp Trp  
 2076 1 5 10 15  
 2077 Leu Gln Glu Gly Leu Leu Val Trp Thr Trp His His Phe Asp Gln Leu  
 2078 20 25 30  
 2079 Val His Pro Cys Tyr Arg Ser His Tyr Ser Ser Val His Leu Ser Tyr  
 2080 35 40 45  
 2081 Trp Thr Val Ser Leu Met Val Pro Leu Leu Trp Ser Pro Phe Val Cys  
 2082 50 55 60  
 2083 Met Glu Leu Gln Leu Pro Lys Tyr Leu Tyr Ile Leu Leu Arg Lys Asp  
 2084 65 70 75 80  
 2085 Phe Ile Thr Leu Thr Ser Ser Thr Leu Pro Arg Ala Gln Lys Lys Pro  
 2086 85 90 95  
 2087 Cys Leu Leu Trp Tyr Val Gln Leu His Ser Ser Leu Phe Ala Val Glu  
 2088 100 105 110  
 2089 His Phe Phe His Ile Ala Pro Ile Leu Leu Ile Arg Ser Gln Arg Glu  
 2090 115 120 125  
 2091 Cys Phe Phe Ser Ile Leu Glu His Ser Met Thr Trp Lys Glu Met Gln  
 2092 130 135 140  
 2093 Leu Asn Gly Thr Leu Glu Tyr Gly Ser Met Gly Leu Ile Ile Leu Glu  
 2094 145 150 155 160  
 2095 Phe Leu Thr Pro Leu Thr Phe Leu Arg Ser Met Ile Val Ser Glu Leu  
 2096 165 170 175  
 E--> 2097 Thr Val Arg Arg Met His Leu Phe Val Val Phe Leu Gly Ile Phe Xaa  
 2098 180 185 190

*see p. 3 for  
 error explanation*

## RAW SEQUENCE LISTING

DATE: 02/11/2003

PATENT APPLICATION: US/10/002,631B

TIME: 10:44:56

Input Set : A:\10002631sequencelisting.txt

Output Set: N:\CRF4\02112003\J002631B.raw

2099	Val	His	Phe	Leu	Ile	Arg	Lys	Asn	Trp	Tyr	Leu	Pro	Ala	Pro	Glu	Val
2100			195					200					205			
2101	Ser	Pro	Arg	Asn	Pro	Pro	His	Phe	Arg	Leu	Ile	Ser	Lys	Glu	Gln	Thr
2102		210					215					220				
2103	Pro	Trp	Asp	Ser	Ile	Lys	Leu	Thr	Phe	Glu	Ala	Thr	Gly	Ser		
2104	225					230					235					

## VARIABLE LOCATION SUMMARY

DATE: 02/11/2003

PATENT APPLICATION: US/10/002,631B

TIME: 10:44:57

Input Set : A:\10002631sequencelisting.txt

Output Set: N:\CRF4\02112003\J002631B.raw

Use of n's or Xaa's (NEW RULES):

Use of n's and/or Xaa's have been detected in the Sequence Listing.

Use of &lt;220&gt; to &lt;223&gt; is MANDATORY if n's or Xaa's are present.

in &lt;220&gt; to &lt;223&gt; section, please explain location of n or Xaa, and which residue n or Xaa represents.

Seq#:1; N Pos. 608,682,724,735,743,746,747,753,754,771,782,784,798,800,804  
Seq#:1; N Pos. 811,812,819,821,824,825,827,834,837,844,857,859,867,869,876  
Seq#:1; N Pos. 878,880,881,883,884  
Seq#:2; Xaa Pos. 1,2,3,5,6,8,9,13,16,17,19,20,21,22,24,27,28,29,34,38,43,44  
Seq#:2; Xaa Pos. 46,47,50,53,67,92  
Seq#:9; N Pos. 545,615,629,650,656,669,726,746,753,755,757  
Seq#:10; Xaa Pos. 5,6,8,15,34,38,40,47,52,75  
Seq#:13; N Pos. 527,638,682,685,703,734,746,766,805,810,831,832,841,846,849  
Seq#:13; N Pos. 856,858,867,888,895,897,900,901,904,910,916,931,932,933,938  
Seq#:13; N Pos. 945  
Seq#:14; Xaa Pos. 2,4,6,14,15,18,25,28,31,32,37,43,44,57,64,68,84,100,135  
Seq#:15; N Pos. 571  
Seq#:19; N Pos. 634,662,689,700,710,721,758,783,804,840,859,884,885,889,919  
Seq#:20; Xaa Pos. 3,12,14,29,41,48,56,71,73,76,84,93  
Seq#:25; N Pos. 582,602  
Seq#:26; Xaa Pos. 26,33  
Seq#:27; N Pos. 613,651,695,749,757,769,776,785,787,812,818,830,853,874,882  
Seq#:27; N Pos. 908,915  
Seq#:28; Xaa Pos. 1,3,12,14,20,27,31,33,40,41,44,46,50,53,67,82,93  
Seq#:29; N Pos. 611,636,663,720,772,814,823,843,874,876,885,896,908,909,916  
Seq#:29; N Pos. 928  
Seq#:30; Xaa Pos. 1,8,12,16,19,30,70,87,96,104  
Seq#:31; N Pos. 610,628,686,747,781,789,795,821,842,871,893,897,918  
Seq#:32; Xaa Pos. 1,8,16,32,40,42,45,56,75,94,100  
Seq#:33; N Pos. 596,610,735,740,767,771,786,790,803,805,815,816,817,819,825  
Seq#:33; N Pos. 834,835,842,847,848,854,857,858,859,861,863,870,871,875,876  
Seq#:33; N Pos. 877,884,889,891,898,908,913,914,915  
Seq#:34; Xaa Pos. 1,3,6,9,11,13,14,15,16,18,19,20,21,23,25,27,28,31,33,34  
Seq#:34; Xaa Pos. 36,37,41,43,48,49,57,59,103  
Seq#:35; N Pos. 596,610,735,740,767,771,786,790,803,805,815,816,817,819,825  
Seq#:35; N Pos. 834,835,842,847,848,854,857,858,859,861,863,870,871,875,876  
Seq#:35; N Pos. 877,884,889,891,898,908,913,914,915  
Seq#:37; N Pos. 586  
Seq#:39; N Pos. 634,653,690,696,726,731,744,765,772,780,790,802,832,855,872  
Seq#:39; N Pos. 880,895,896  
Seq#:40; Xaa Pos. 1,9,15,22,40,45,51,55,57,67,69,81,86  
Seq#:41; N Pos. 200,211  
Seq#:42; Xaa Pos. 121,125  
Seq#:47; N Pos. 7,9,12,14,15,20,21,35,36,37,38,76,103,115,120,121,185,190  
Seq#:47; N Pos. 192,198,205,209,237,243,248,260,267,269,272,287,290,297,298  
Seq#:47; N Pos. 300,303,305,314,315,316,320,326,331,332,333,341,342,352,353  
Seq#:47; N Pos. 359,364,365,368,378,383,385,400,414,440,476,487,497,524,545  
Seq#:47; N Pos. 550,590,594

## VARIABLE LOCATION SUMMARY

DATE: 02/11/2003

PATENT APPLICATION: US/10/002,631B

TIME: 10:44:57

Input Set : A:\10002631sequencelisting.txt

Output Set: N:\CRF4\02112003\J002631B.raw

Seq#:48; Xaa Pos. 2,3,17,24,33,40,52,61,70,71,73,76,77,79,81,83,86,88,90,92  
Seq#:48; Xaa Pos. 95,96,97,98,100,101,106,107,108,110,114,116,118,127,128  
Seq#:48; Xaa Pos. 131,133,135,155,156,157,169,182,183,188,190,191,192  
Seq#:49; N Pos. 191,538  
Seq#:50; Xaa Pos. 107  
Seq#:51; N Pos. 512,547,555,563,580,614,624,625,630,632,639,650,666,670,671  
Seq#:51; N Pos. 672,674,679,680,682,684,685,686,693,697,701,702,705,706,708  
Seq#:51; N Pos. 712,713,714,715,720,721,723,726,728,730,731,734,735,737,740

*fyi* Use of n and/or Xaa has been detected in the Sequence Listing.  
Review the Sequence Listing to insure a corresponding  
explanation is presented in the <220> to <223> fields of  
each sequence using n or Xaa.

## VERIFICATION SUMMARY

DATE: 02/11/2003

PATENT APPLICATION: US/10/002,631B

TIME: 10:44:57

Input Set : A:\10002631sequencelisting.txt

Output Set: N:\CRF4\02112003\J002631B.raw

L:42 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:600  
M:341 Repeated in SeqNo=1  
L:59 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0  
M:341 Repeated in SeqNo=2  
L:247 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:540  
M:341 Repeated in SeqNo=9  
L:263 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0  
M:341 Repeated in SeqNo=10  
L:360 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:480  
M:341 Repeated in SeqNo=13  
L:380 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0  
M:341 Repeated in SeqNo=14  
L:442 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:540  
L:532 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:600  
M:341 Repeated in SeqNo=19  
L:550 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0  
M:341 Repeated in SeqNo=20  
L:685 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:540  
M:341 Repeated in SeqNo=25  
L:702 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:16  
M:341 Repeated in SeqNo=26  
L:751 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:600  
M:341 Repeated in SeqNo=27  
L:769 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0  
M:341 Repeated in SeqNo=28  
L:822 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:600  
M:341 Repeated in SeqNo=29  
L:840 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:0  
M:341 Repeated in SeqNo=30  
L:903 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:600  
M:341 Repeated in SeqNo=31  
L:921 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:0  
M:341 Repeated in SeqNo=32  
L:981 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:540  
M:341 Repeated in SeqNo=33  
L:1000 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34 after pos.:0  
M:341 Repeated in SeqNo=34  
L:1060 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:540  
M:341 Repeated in SeqNo=35  
L:1110 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:540  
L:1166 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:600  
M:341 Repeated in SeqNo=39  
L:1183 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:0  
M:341 Repeated in SeqNo=40  
L:1237 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:180  
L:1271 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:112  
L:1375 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47 after pos.:0  
M:341 Repeated in SeqNo=47

**VERIFICATION SUMMARY**

DATE: 02/11/2003

PATENT APPLICATION: US/10/002,631B

TIME: 10:44:57

Input Set : A:\10002631sequencelisting.txt

Output Set: N:\CRF4\02112003\J002631B.raw

L:1397 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48 after pos.:0

M:341 Repeated in SeqNo=48

L:2097 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:74